



A SPECIAL REPORT

Managing Your
Triglycerides
and Other Lipids



What are Triglycerides?



If your healthcare provider has given you a blood test after you fasted for a set amount of time, you may have heard about your “triglyceride number” during an office visit. But what are triglycerides, and what does your “triglyceride number” mean?

Triglycerides are a type of lipid (fat) in your body’s bloodstream. In fact, they’re the most common type. Your body stores fat in the form of triglycerides when you eat more calories than you use during your daily activities.

But triglycerides are just one part of your total heart-health picture. Triglycerides are part of your cholesterol profile, which includes your total cholesterol level, and your low-density lipoprotein (LDL) and high-density lipoprotein (HDL) blood lipids. LDLs and triglycerides are both considered “bad” fats because of the heart-related health problems they can cause. HDL, on the other hand, is often called “good” fat because it helps the body get rid of the “bad” cholesterol.

In this special report, we’ll take a closer look at why these blood lipids matter, why it’s important to control them, and **what you can do** to keep your blood lipid numbers, including triglycerides, in a healthy range.

To learn more about triglycerides, use this guide and talk with your healthcare provider. For more information, log on to the American Heart Association’s Web site at www.americanheart.org or call the AHA at **1-800-AHA-USA1**. Also, consult the National Heart, Lung, and Blood Institute’s Web site at www.nhlbi.nih.gov, and MedlinePlus at www.medlineplus.gov.

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American Academy of Physician Assistants

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Lipids (Blood Fat): The Lowdown

LDL. HDL. Triglycerides. What are they? What do the numbers mean? Why are they so important to my health?

Low-density lipoprotein (LDL) cholesterol, high-density lipoprotein (HDL) cholesterol, and triglycerides are all types of cholesterol — that is, lipids (fats) in your bloodstream. Cholesterol is a soft, waxy substance in the bloodstream, which your body uses to make new cells. But too much cholesterol can build up on your artery walls. LDL cholesterol and triglycerides are considered “bad” because they can build up and clog your arteries, blocking the blood flow to your heart and brain. HDL cholesterol is considered “good” because it helps remove the “bad” fats (LDLs and triglycerides) from your bloodstream.

But some people have too much “bad” cholesterol, and not enough of the good type. This can happen by eating too many foods high in cholesterol, *trans* and saturated fats, or by not getting enough regular physical activity — or both. But it can also be a problem they inherited from their family’s genes.

The problem with too much of the bad types of lipid (LDLs and triglycerides) in your bloodstream is that it can lead to cardiovascular disease, the No. 1 killer in the United States. How does this happen? These blood lipids can create deposits that build up on the inside walls of



your arteries, called plaques. This build up chokes off the artery, reducing blood flow through your body. This condition is called atherosclerosis, and it can lead to heart disease, stroke, a heart attack, or other serious, life-threatening conditions.

HDL cholesterol, on the other hand, is a good thing for your body. HDL may help remove the excess cholesterol, including LDLs and triglycerides, from your bloodstream. That helps keep your arteries clear so your body gets all the blood it needs to function.

How do you know if you have too much “bad” cholesterol, or enough of the “good” cholesterol? That’s where your healthcare provider can help.

Screening and Diagnosis



All adults over the age of 20 should be screened for their blood lipid levels every 5 years. More frequent screenings may be required for those who have heart-health issues, newly diagnosed conditions (such as diabetes), or any recent changes in weight or health.

A very simple blood test, called a fasting lipoprotein profile, can be used to see if your lipids are at healthy levels. The profile tells your healthcare provider four things:

- Your total cholesterol level
- Your LDL cholesterol level
- Your HDL cholesterol level
- Your triglycerides level

The first thing your healthcare provider looks at is your total cholesterol. He or she will consider your family history, your medical history, and other factors to decide on the next steps.

All four numbers are important measures that affect your heart's health. If your LDL and triglyceride levels are too high, your provider will mainly treat the LDL. Treating the LDL often brings the triglyceride levels down, as well — but not always. Some people have normal LDL, but high triglycerides.

The table on this page shows healthy levels for each type of blood lipid.

Type of Lipid	Ideal Level
Total cholesterol	Less than 200 mg/dL
LDL cholesterol	Less than 100 mg/dL
HDL cholesterol	40 mg/dL or higher for men 50 mg/dL or higher for women 60 mg/dL or higher is considered protective against heart disease for both men and women
Triglyceride levels	Less than 150 mg/dL

For heart or risk related information, call the American Heart Association at 1-800-AHA-USA1 (1-800-242-8721) or visit us online at americanheart.org. For stroke information, call the American Stroke Association at 1-888-4-STROKE (1-888-478-7653), or visit strokeassociation.org. For information on life after stroke, call and ask for the Stroke Family Support Network.

Tell Us What You Think

Was this special report helpful to you? Please let us know what you think. Visit www.vitalitycommunications.com/lipids and fill out a quick survey.

Make the

CHANGES

Lifestyle and Diet

What health factors increase your risk for cardiovascular disease and cause your cholesterol and blood lipids to be at less than the ideal levels?

- Eating too much cholesterol, saturated fat and *trans* fat
- Not getting enough regular physical activity
- Overweight and obesity
- Smoking
- A family history of excess blood lipids

Diet

No matter what the cause, an abnormal cholesterol profile is usually treated. Your healthcare provider will counsel you about the treatment that is right for you.

Lifestyle changes are often a first step. Eating a “heart-healthy” diet is a good place to begin. Focus on these types of foods:

- More fruits and vegetables
- More whole-grain, high-fiber foods
- Fat-free and low-fat (1%) dairy products
- Fish and other lean meats, as well as legumes, beans, tofu, and peas
- Limit beverages and foods with added sugars
- If triglycerides are a specific concern, more soluble fiber (which is found in oats, oat bran, peanuts, beans, and



some fruits) and plant stanols and sterols (which are found in nuts, vegetable oils, corn, and rice)

Physical Activity

Physical activity should be part of the plan, too. Most healthy adults do not need to consult a healthcare provider before becoming physically active. But, if you have a chronic condition, talk with your healthcare provider first so you’ll know what sort of exercise will be safe for you based on your overall physical condition and how much to do. Try to get at least 2½ hours of physical activity — with enough effort that it raises your heartbeat to a safe extent — every week.

If you are overweight or obese, these diet and lifestyle changes may be part of a plan to reduce your weight. Losing just 5% to 10% of your weight can help you lower your risks for cardiovascular disease.

Alcohol

The amount of alcohol you drink is also important for heart health. If you don't drink alcohol, don't start. If you do drink, limit the amount. Drinking too much alcohol can raise your triglycerides, and is a major risk for many other serious health conditions, including stroke, alcoholism, and liver disease.

If you're male, drink no more than two alcoholic beverages per day. Women should have only one beverage per day (and should not drink at all during pregnancy). The chart on this page can help you determine what the right level is for you.

Smoking Cessation

One of the biggest concerns for everyone's health is smoking. Tobacco smoke is linked to many major chronic diseases, including cancer, heart disease, stroke, and more. The American Heart Association estimates that 440,000 preventable deaths every year are directly linked to smoking. Smoking is also a woman's No. 1 preventable risk for heart disease.

If you don't smoke, don't start. If you smoke now, quit — your healthcare provider can help you find a way to quit that is right for you.

Beverage	Amount	Total
Beer	12 oz.	Men: 24 oz. (two beers); Women: 12 oz. (one beer)
Wine	4 oz.	Men: 8 oz. (two glasses); Women: 4 oz. (one glass)
Liquor (80 proof)	1.5 oz.	Men: 3.0 oz. (two jiggers); Women: 1.5 oz. (one jigger)
Liquor (100 proof)	1 oz.	Men: 2 oz. (two shots); Women: 1 oz. (one shot)



Medication

Sometimes making changes to your diet and increasing physical activity don't do enough to lower LDL and triglyceride levels. Or you may have other risks for cardiovascular disease, even if your numbers are in a good range. If that's the case, your healthcare provider may prescribe medications that help your body reduce the levels of "bad" lipids and sometimes raise the "good" HDL levels, too.

There are four types of medication most often prescribed to lower blood lipid levels:

- **Fibrates:** This family of medications raises HDL levels and lower triglyceride levels in the bloodstream.
- **Statins:** These medications block an enzyme your liver uses to make lipids, so your body produces less of the "bad" LDL cholesterol and fewer triglycerides.
- **Bile acid sequestrants:** Sometimes used along with the first two medication types listed here, bile acid sequestrants help your body get rid of bad lipids. They're sometimes known as anion exchange resins.
- **Prescription niacin (nicotinic acid):** This type of medication slows your liver's production of blood fats and can be used with other medications to raise HDL levels and lower LDL and triglyceride levels.

For those who have high triglyceride levels but normal levels of lipids, large doses of omega-3 fatty acids may be prescribed

by a healthcare provider, although increasing omega-3 fatty acid intake through foods is preferable.

- **Omega-3 fatty acids:** It's important to eat a healthy diet consisting of good sources of omega-3 fatty acids, such as oily fish (mackerel, salmon), and plant sources, such as soybean oils and flaxseeds. If adding omega-3 foods to the diet doesn't reduce your triglyceride levels enough, your provider may order a prescription-only dose of omega-3 fatty acids.

Always remember to tell your healthcare provider about all the medications you take, including prescription and over-the-counter medicines, as well as any herbal supplements and vitamins. Medicines and sometimes certain foods and beverages can affect the medicines you take, which can cause side effects or other problems.



What is a physician assistant?

Physician assistants (PAs) are medical professionals licensed to examine, test and treat patients with the supervision of a doctor as part of your health care team.

The exact duties of PAs depend upon the type of medical setting in which they work, the understanding they have with their supervising physicians, their level of experience and the laws in their states.

What can a PA do?

All PAs can:

- conduct physical exams
- diagnose and treat illnesses
- order and interpret tests
- develop treatment plans
- counsel on preventive health care
- assist in surgery
- write prescriptions

The scope of a PA's responsibilities corresponds to the supervising physician's practice. All fifty states, the District of Columbia, and Guam authorize PAs to practice and prescribe medications.

What is the American Academy of Physician Assistants (AAPA)?

The American Academy of Physician Assistants (AAPA) is the only national professional association that represents all PAs across all medical and surgical specialties. Founded in 1968, AAPA works to increase the professional and personal growth of the entire PA workforce by providing comprehensive support and advocacy for PAs so that they may, in turn, provide patients with increased access to quality, cost-effective health care.

What do physicians think about PAs?

The relationship between a PA and supervising physician is one of mutual trust and respect. They practice as members of a medical team. The PA is a representative of the physician, treating the patient in the style and manner developed and directed by the supervising doctor.

The American Medical Association, the American College of Surgeons, the American Academy of Family Physicians, the American College of Physicians, and other national medical organizations support the PA profession by actively serving on the national PA certifying commission and the PA education program-accrediting agency.

The Eighth Report to the President and Congress on the Status of Health Personnel in the United States (released in 1992) states, "Physician assistants have demonstrated their clinical effectiveness both in terms of quality of care and patient acceptance."

What's the difference between a PA and a physician?

PAs are educated in medicine, like doctors; in some schools, they attend many of the same classes as medical students. One of the main differences between PA education and physician education is not the core content of the curriculum, but the amount of time spent in formal education. In addition to time in school, doctors are required to do an internship and the majority also complete a residency in a specialty. PAs do not have to undertake an internship or residency, but required rotations are part of the curriculum. A PA shares the responsibility for caring for a patient with the supervising doctor.

For more information about physician assistants, their education, and what they do, visit www.aapa.org.

This Special Report courtesy of:



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